

***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES***

APPLICANTS:	Tengwall <i>et al.</i>	GROUP ART UNIT:	2131
SERIAL NO.:	10/634,223	EXAMINER:	Arezoo Sherkat
FILING DATE:	August 4, 2003		
TITLE:	SYSTEM AND METHOD FOR OPERATING A WIRELESS DEVICE NETWORK		

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P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDED APPEAL BRIEF**

This amended Appeal Brief is submitted to the Board of Patent Appeals and Interferences (“the Board”) in accordance with 37 C.F.R. § 41.37 and in response to a Notification of Non-Compliant Appeal Brief to amend the Appeal Brief filed on July 2, 2008 in furtherance of the Notice of Appeal filed May 8, 2008, in support of the appeal from final rejection of pending claims 1-80 in the above-identified application.

Appellants believe that no fee is due for this amended Appeal Brief to be entered and considered. However, please consider this a conditional petition for the proper extension, if one is required, and authorization to charge any additional fees that may be due for further extensions of time or any other purpose associated with this submission, or credit any overpayment, to Appellants’ undersigned counsel’s deposit account number 07-1700 with reference to docket number LRW-001.

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### **I. REAL PARTY IN INTEREST**

The real party in interest is LRW Digital, Inc., the assignee of the above-identified patent application, pursuant to an assignment recorded in the records of the U.S. Patent and Trademark Office on October 6, 2003, at Reel 014555, beginning at Frame 0485.

### **II. RELATED APPEALS AND INTERFERENCES**

No other appeals or interferences directly affect or will be directly affected by the Board's decision in the present appeal.

### **III. STATUS OF CLAIMS**

The application as filed contained Claims 1–15. During prosecution, Claims 16–80 were added. Claims 1–80 remain pending, have been finally rejected, and are the subject of this appeal.

### **IV. STATUS OF AMENDMENTS**

No amendments have been filed subsequent to the Office Action mailed on April 7, 2008.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The claims of the present invention relate to transmitting data.<sup>1</sup> A system in accordance with the invention includes a database for storing data and a server for processing data.<sup>2</sup> Also, the system includes a relay that encodes, routes, and transmits the data.<sup>3</sup> A firewall, in this instance, provides security for the data, the database, the server, the relay, and all other private network components.<sup>4</sup> The firewall protects these private components from external threats, such as “hackers.”<sup>5</sup>

In one aspect, and as recited in independent claim 1, the invention relates to a system for transmitting data stored in at least one database and processed by a server arrangement to at least one wireless device that receives data from a wireless carrier network.<sup>6</sup> The system comprises at least one relay arrangement for routing the data to the wireless carrier network for transmission, over the network, to the wireless device(s).<sup>7</sup> The system also comprises a firewall arrangement that provides security for the data, the server arrangement and each relay arrangement.<sup>8</sup> Each relay arrangement is arranged behind the firewall arrangement<sup>9</sup> and is configured to push the data from behind the firewall arrangement to the wireless device(s) such that the data is only

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<sup>1</sup> Specification at paragraph [0008].

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> Specification at paragraph [0014].

<sup>7</sup> *Id.*

<sup>8</sup> Specification at paragraph [0038].

<sup>9</sup> Specification at paragraph [0023].

transmitted when the relay arrangement(s) determine that the wireless device(s) can receive the data.<sup>10</sup> The data is not persistently stored outside the firewall until reception by the wireless device.<sup>11</sup>

In another aspect, and as recited in independent claim 10, the invention relates to a method for transmitting data.<sup>12</sup> The method comprises retrieving data via a server arrangement; processing the data in the server arrangement; sending the data to a relay arrangement arranged behind a firewall arrangement; and processing the data in the relay arrangement.<sup>13</sup> The method also comprises routing the data to at least one wireless carrier network for transmission to at least one wireless device,<sup>14</sup> wherein the data being pushed from the relay arrangement (behind the firewall arrangement) to the wireless device(s) is only transmitted when the relay arrangement determines that the wireless device(s) can receive the data<sup>15</sup>, and the firewall arrangement provides security for the data, the server arrangement and the relay arrangement.<sup>16</sup> The method further comprises receiving the data at the wireless carrier network(s); processing the data in the wireless carrier network(s); sending the data to the wireless device(s); receiving the data at the wireless device(s); and processing the data in the wireless device(s), whereby the data is not persistently stored outside the firewall arrangement until reception by the wireless device.<sup>17</sup>

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<sup>10</sup> Specification at paragraph [0025].

<sup>11</sup> Specification at paragraph [0038].

<sup>12</sup> Specification at paragraph [0008].

<sup>13</sup> Specification at paragraph [0038].

<sup>14</sup> Specification at paragraph [0014].

<sup>15</sup> Specification at paragraph [0025].

<sup>16</sup> Specification at paragraph [0038].

<sup>17</sup> *Id.*

In another aspect, and as recited in independent claim 14, the invention relates to an apparatus for transmitting data.<sup>18</sup> The apparatus comprises means for processing data; means for pushing the data directly to a wireless carrier network; means for securing the data, the means for processing and the means for pushing; and at least one wireless device that receives data from over the wireless carrier network wherein the means for pushing is arranged behind the means for securing.<sup>19</sup> The means for pushing is configured to push the data such that the data is only transmitted when the means for pushing determines that the wireless device(s) can receive the data.<sup>20</sup> Additionally, the data is not persistently stored outside the means for securing until reception by the wireless device.<sup>21</sup>

In another aspect, and as recited in independent claim 15, the invention relates to a system for transmitting data stored in at least one database and processed by a server arrangement to at least one wireless device that receives data from a wireless carrier network.<sup>22</sup> The system comprises at least one relay arrangement for routing the data to the wireless carrier network for transmission to the wireless device(s),<sup>23</sup> whereby each relay arrangement is arranged within a controlled network and is configured to push the data from behind a firewall arrangement within the controlled network to the wireless device(s) such that the data is only transmitted when the relay arrangement(s) determine that the wireless device(s) can receive the

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<sup>18</sup> Specification at paragraph [0008].

<sup>19</sup> Specification at paragraphs [0023]; [0038].

<sup>20</sup> Specification at paragraph [0025].

<sup>21</sup> Specification at paragraph [0038].

<sup>22</sup> Specification at paragraph [0014].

<sup>23</sup> *Id.*

data.<sup>24</sup> Additionally, the data is not persistently stored outside the firewall arrangement until reception by the wireless device.<sup>25</sup>

In another aspect, and as recited in independent claim 24, the invention relates to an apparatus to route data for transmission over a wireless carrier network.<sup>26</sup> The apparatus comprises a first arrangement to relay data stored in at least one database, and processed by a server arrangement, directly to a wireless carrier network for transmission to at least one wireless device.<sup>27</sup> The first arrangement is configured to be arranged behind a firewall arrangement.<sup>28</sup> The firewall arrangement provides security for the data, the server arrangement and the first arrangement,<sup>29</sup> and the first arrangement is configured to push the data from behind the firewall arrangement to the wireless device(s) only when the first arrangement determines that the wireless device(s) can receive the data.<sup>30</sup> Additionally, the data is not persistently stored outside the firewall arrangement until reception by the wireless device.<sup>31</sup>

In another aspect, and as recited in independent claim 26, the invention relates to a system for transmitting data stored in at least one database to at least one wireless device.<sup>32</sup> The system comprises a relay arrangement to route the data directly to a wireless carrier network for transmission over the wireless carrier network.<sup>33</sup> The relay arrangement is configured to

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<sup>24</sup> Specification at paragraph [0025].

<sup>25</sup> Specification at paragraph [0038].

<sup>26</sup> Specification at paragraph [0008].

<sup>27</sup> Specification at paragraph [0038].

<sup>28</sup> Specification at paragraph [0023].

<sup>29</sup> Specification at paragraph [0038].

<sup>30</sup> Specification at paragraph [0025].

<sup>31</sup> Specification at paragraph [0038].

<sup>32</sup> Specification at paragraph [0014].

<sup>33</sup> Specification at paragraph [0038].

communicate with the wireless device(s) via a firewall arrangement that provides security for the data and the relay arrangement.<sup>34</sup> The relay arrangement is configured to push the data from behind the firewall arrangement to the wireless device(s) such that the data is only transmitted when the first arrangement determines that the wireless device(s) can receive the data.<sup>35</sup> Additionally, the data is not persistently stored outside the firewall arrangement until reception by the wireless device.<sup>36</sup>

In another aspect, and as recited in independent claim 55, the invention relates to a system for transmitting data processed by a server arrangement to at least one wireless device that receives data from a wireless network.<sup>37</sup> The system comprises a relay arrangement for routing the data to the wireless network for transmission, over the wireless network, to the wireless device(s).<sup>38</sup> The system also comprises a firewall arrangement that provides security for the data, the server arrangement and the relay arrangement.<sup>39</sup> The relay arrangement is situated behind the firewall arrangement and is configured to push the data to the wireless device(s) such that the data is not stored outside of the firewall arrangement while enroute to the wireless network.<sup>40</sup>

In another aspect, and as recited in independent claim 71, the invention relates to an apparatus for transmitting data.<sup>41</sup> The apparatus comprises an arrangement for relaying data to a

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<sup>34</sup> Specification at paragraphs [0023]; [0038].

<sup>35</sup> Specification at paragraph [0025].

<sup>36</sup> Specification at paragraph [0038].

<sup>37</sup> Specification at paragraph [0014].

<sup>38</sup> Specification at paragraph [0038].

<sup>39</sup> Specification at paragraph [0038].

<sup>40</sup> Specification at paragraph [0025].

<sup>41</sup> Specification at paragraph [0014].



wireless carrier network such that the data is only pushed beyond the arrangement to secure the data when the arrangement determines that wireless device(s) that receive data from over the wireless carrier network can receive the data.<sup>42</sup> Additionally, the data is not persistently stored outside the arrangement to secure the data until reception by the wireless device.<sup>43</sup>

## **VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-4, 9-18, and 22-80 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2004/0205248 to Little *et al.* (hereinafter referred to as “Little”) in view of U.S. Publication No. 2003/0120733 to Forman (hereinafter referred to as “Forman”).

Claims 5-8 and 19-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Little in view of U.S. Patent No. 6,779,039 to Bommareddy *et al.* (hereinafter referred to as “Bommareddy”).

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<sup>42</sup> Specification at paragraph [0025].

<sup>43</sup> Specification at paragraph [0038].

## VII. ARGUMENT

For reasons set forth below, the final rejection of Claims 1–80 is respectfully appealed. In the ensuing argument, each of the Examiner’s grouped rejections is addressed in turn.

**A. *Claims 1-4, 9-18, and 22-80 recite nonobvious subject matter and are patentable under 35 U.S.C. § 103(a) over Little in view of Forman.***

**1. The Rejections and the Examiner’s Failure to Address Arguments Presented.**

In an Office Action dated November 13, 2007, the Examiner rejected claims 1-4, 9-18, 22-23, 25, and 27-80 as obvious under 35 U.S.C. § 103(a) over Little in view of Forman. The Examiner stated that Little discloses each limitation of the independent claims except for one, conceding that Little, on its own, “does not explicitly disclose that the data is only transmitted when the at least one relay arrangement determines that the at least one wireless device can receive the data.”<sup>44</sup> But according to the Examiner, Forman discloses the missing limitation: “Forman discloses an email server system that manages, checks, and verifies the status of every email address registered in and managed by the email server system before sending a message to the recipient ... Therefore ... [modifying the] teachings of Little with teachings of Forman [was obvious] because it would allow determining the status of the recipient application before a message is sent to the recipient application as disclosed by Forman.”<sup>45</sup>

Appellants, in their January 11, 2008 Response to Office Action, provided five arguments demonstrating that Forman does not disclose the limitation which the Examiner conceded is

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<sup>44</sup> November 13, 2007 Office Action at 6.

<sup>45</sup> *Id.* at 9.

missing from Little – *i.e.*, that “the data is only transmitted when the at least one relay arrangement determines that the at least one wireless device can receive the data”:

**First**, Forman seeks to avoid the situation in which a user spends time and effort to compose a message to a recipient.<sup>46</sup> In contrast, in accordance with the present claims, the email has been composed and sent by the sender side user. In other words, as set forth in Appellants’ claims, the system is for “transmitting data stored in at least one database.” There is only data if the message is already composed.

**Second**, in Appellants’ systems and methods, the sender-side user has relinquished control of the email prior to any determination as to whether the email can reach its intended destination. As set forth in the claims, the data is available to be sent (*i.e.*, pushed) to the “at least one wireless device” only if it has been released (*i.e.*, sent) by the [sender side] user. The user cannot decide whether the data is to be “pushed.” Forman, by contrast, allows users of the email applications to check status of an email address before sending any message to that email address.

**Third**, Appellants’ claims require the “relay arrangement” (*i.e.*, computer) to make the actual decision to transmit the data to the wireless application only when it determines that the intended recipient wireless device is available to receive the data. In Forman, by contrast, the server application does not actually make the decision whether to transmit the data. Rather, the sender-side user makes the decision whether to send, based on whether or not an “out-of-office” status is displayed.

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<sup>46</sup> Forman at para. 29; *see also* Forman at para. 44.

*Fourth*, in Appellants' system, the Relay Arrangement is associated with the *recipient* wireless device, whereas in Forman, the determination is made on the *sender* side by the composer of the email.

*Fifth*, in Appellants' claims, once the data is sent from the user at the sender-side application, the data is only transmitted when the relay arrangement(s) determine that the wireless device(s) can receive the data." In Forman, by contrast, the sender's decision to send data is implemented whether or not the intended recipient is available.

In an Office Action dated April 7, 2008, the Examiner rejected Appellants' arguments regarding Forman,<sup>47</sup> but only addressed the fourth argument – *i.e.*, that "in Applicants' system, the Relay Arrangement is associated with the *recipient* wireless device as opposed to Forman where the determination is made on the *sender* side by the composer of the email."<sup>48</sup> The Examiner's rationale for rejecting this argument was that:

Forman explicitly discloses that the status notification module 62 of the server system 11 receives the request from the status check module 32 of the sender application; it then accesses the status table 61 of the server system 11 for the status information of that email address. The status notification module 62 then sends the status information to the sender application such that the status of the recipient application is determined before a message is sent to the recipient application (par. 55). Note that the *determination step* that decides whether or not the message is sent to the recipient is done by the status notification module 62 of the server system by consulting the status table 61. Therefore, to the extent of the claim language currently presented Forman does disclose wherein the data is 'only transmitted when the at least one relay arrangement determines that the at least one wireless device can receive the data ...'<sup>49</sup>

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<sup>47</sup> The April 7, 2008 obviousness rejection under 35 U.S.C. § 103(a) over Little in view of Forman also included claims 24 and 26, in addition to claims 1-4, 9-18, 22-23, 25, and 27-80. The Examiner had previously rejected claims 24 and 26 under 35 U.S.C. § 102(c) as being anticipated by Little. Appellants amended claims 24 and 26 in their January 11, 2008 Response to Office Action to circumvent the § 102(c) rejection.

<sup>48</sup> April 7, 2008 Office Action at 1.

<sup>49</sup> *Id.* at 1-2 (emphasis added).

## 2. Discussion and Analysis.

The present claims require that data not be transmitted until it can be determined that the recipient wireless device(s) can receive the data. Although Appellants presented the five arguments set forth above, which plainly demonstrate that Forman does not disclose or suggest this concept, the Examiner improperly ignored four of them:

- Whereas Appellants' claims require a message to have already been composed and sent by the sender side user before acting, Forman's system merely facilitates checking the availability status of a prospective message recipient;
- Whereas a sender-side user of the Forman system can learn the availability status of a prospective message recipient before sending a message, a sender-side user of Appellants' system relinquishes control of the email prior to the determination of the availability status of the email's intended destination;
- In Forman, the sender-side user makes the decision whether or not to send an email based on the whether or not there is an "out-of-office" status displayed, whereas in Appellants' system, the "relay arrangement" (i.e., computer) makes the decision to transmit the data only when it determines that the intended recipient wireless device is available to receive the data; and
- Whereas in Forman even if an intended recipient displays an "out-of-office" status, the sender-side user can decide to send data regardless of the intended recipient's unavailability, in Appellants' system the data can only be transmitted to the intended recipient when the wireless device can receive the data.

Each of the preceding arguments should have been addressed by the Examiner.<sup>50</sup> Moreover, in her response to the one argument she did address, the Examiner plainly misconstrued Forman. Specifically, the Examiner misinterprets Forman's "determination step" as a decision whether or not to send. But in fact, this step merely determines whether the sender-side user is *informed of the status* of the potential recipient (see Fig. 6) — not whether or not to send the e-mail. That decision remains with the sender-side user. Nothing in Forman, in other words, prevents the sender-side user from sending a message even if the system informs him that the intended recipient has an "out-of-office" status displayed. In this regard, Forman explicitly states:

In accordance with one embodiment of the present invention, the email server system 11 also includes a status table 61, and a status notification module 62. These modules 61-62 are connected to each other and to the server engine 60. These two modules 61-62 are employed to allow the email server system 11 to record and notify the status of any of the email addresses registered in and managed by the server system 11, *thus allowing a user of the email system 10 (FIG. 1) to check status of an email address through any one of the email applications 20-20n before sending email messages to that email address.*<sup>51</sup>

Thus, in Forman, it is the sender-side user that makes the final determination of whether or not to send the email, not the "determination step." In Appellants' system and methods, by contrast, the email cannot be sent unless the recipient address is available to receive messages. Therefore, the Examiner's reliance on Forman is plainly mistaken as that reference does not, in fact, show a system where "the data is only transmitted when the at least one relay arrangement determines that the at least one wireless device can receive the data."

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<sup>50</sup> MPEP Section 707.07(f) states in an Examiner's Note that "[t]he Examiner must address all arguments which have not already been responded to in the statement of the rejection."

<sup>51</sup> Forman at Paragraph 37 (emphasis added).

Accordingly, for the reasons discussed above, the Examiner's rejection fails to satisfy the requirements of 35 U.S.C. § 103, and claims 1-4, 9-18, and 22-80 are nonobvious in view of the cited prior art.

**B. *Claims 5-8 and 19-21 constitute nonobvious subject matter and are patentable under 35 U.S.C. § 103(a) over Little in view of Bommareddy.***

In the November 13, 2007 Office Action, the Examiner also rejected claims 5-8 and 19-21 as obvious under 35 U.S.C. § 103(a) over Little in view of Bommareddy, because those claims contain additional limitations relating to a redundant server arrangement, a redundant relay arrangement, and a monitoring element, as is purportedly disclosed in Bommareddy. In the April 7, 2008 Office Action, the Examiner rejected, among others, independent claims 1, 10, and 14 as obvious under 35 U.S.C. § 103(a) over Little in view of Forman.<sup>52</sup> For the reasons set forth above, Forman does not disclose the limitation which the Examiner conceded is missing from Little – *i.e.*, that “the data is only transmitted when the at least one relay arrangement determines that the at least one wireless device can receive the data.” Bommareddy does not disclose or suggest that limitation either. Therefore, Bommareddy cannot supply what Forman lacks with regard to independent claims 1, 10, and 14.

Accordingly, for the reasons discussed above, the Examiner's rejection fails to satisfy the requirements of 35 U.S.C. § 103, and claims 5-8 and 19-21 are nonobvious in view of the cited prior art.

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<sup>52</sup> Claims 5-8 and 19 depend from independent claim 1, claim 20 depends from independent claim 10, and claim 21 depends from independent claim 14.

C. **Conclusion.**

In view of the arguments above, Appellants respectfully submit that Claims 1–80 are patentable and urge the Board to reverse all of the Examiner’s rejections as to each of these claims.

Respectfully submitted,

Date: July 31, 2008

/s/ Steven J. Frank  
Steven J. Frank (Reg. No. 33,497)  
GOODWIN PROCTER LLP  
Exchange Place  
Boston, Massachusetts 02109  
(617) 570-1607

Attorney for Appellants



## **VIII. CLAIMS APPENDIX**

1. A system for transmitting data stored in at least one database and processed by a server arrangement to at least one wireless device that receives data from a wireless carrier network, the system comprising:

at least one relay arrangement for routing the data to the wireless carrier network for transmission over the wireless carrier network to the at least one wireless device; and  
a firewall arrangement that provides security for the data, the server arrangement and each relay arrangement;

wherein each relay arrangement is arranged behind the firewall arrangement and is configured to push the data from behind the firewall arrangement to the at least one wireless device such that the data is only transmitted when the at least one relay arrangement determines that the at least one wireless device can receive the data, whereby the data is not persistently stored outside the firewall until reception by the wireless device.

2. The system of claim 1, wherein the data includes at least one of e-mail data and PIM data.

3. The system of claim 1, wherein the at least one wireless device receives encryption data wirelessly.

4. The system of claim 1, wherein the database includes at least one of an e-mail server and a database server.

5. The system of claim 1, further comprising:

a redundant server arrangement for the server arrangement.

6. The system of claim 1, further comprising:

a redundant relay arrangement for the at least one relay arrangement.

7. The system of claim 5, wherein the redundant server arrangement is located in at least one of a same geographic location and a different geographic location than the server arrangement.
8. The system of claim 6, wherein the redundant relay arrangement is located in a different geographic location than the at least one relay arrangement.
9. The system of claim 1, wherein the data is encrypted.
10. A method for transmitting data, comprising:
  - retrieving data via a server arrangement;
  - processing the data in the server arrangement;
  - sending the data to a relay arrangement arranged behind a firewall arrangement;
  - processing the data in the relay arrangement;
  - routing the data to at least one wireless carrier network for transmission to at least one wireless device, the data being pushed from the relay arrangement from behind the firewall arrangement to the at least one wireless device such that the data is only transmitted when the relay arrangement determines that the at least one wireless device can receive the data, the firewall arrangement providing security for the data, the server arrangement and the relay arrangement;
  - receiving the data at the at least one wireless carrier network;
  - processing the data in the at least one wireless carrier network;
  - sending the data to the at least one wireless device;
  - receiving the data at the at least one wireless device; and
  - processing the data in the at least one wireless device,whereby the data is not persistently stored outside the firewall arrangement until reception by the wireless device.
11. The method of claim 10, wherein the data includes at least one of e-mail data and PIM data.

12. The method of claim 10, further comprising:

sending encryption data to the wireless device via a wireless connection, thus updating operational capabilities of the wireless device.

13. The method of claim 10, wherein the data is encrypted.

14. An apparatus for transmitting data, comprising:

means for processing data;

means for pushing the data directly to a wireless carrier network;

means for securing the data, the means for processing and the means for pushing; and

at least one wireless device that receives data from over the wireless carrier network;

wherein the means for pushing is arranged behind the means for securing, and

wherein the means for pushing is configured to push the data such that the data is

only transmitted when the means for pushing determines that the at least one wireless device can receive the data,

whereby the data is not persistently stored outside the means for securing until reception by the wireless device.

15. A system for transmitting data stored in at least one database and processed by a server arrangement to at least one wireless device that receives data from a wireless carrier network, comprising:

at least one relay arrangement for routing the data to the wireless carrier network for transmission to the at least one wireless device, each relay arrangement being arranged within a controlled network and being configured to push the data from behind a firewall arrangement within the controlled network to the at least one wireless device such that the data is only transmitted when the at least one relay arrangement determines that the at least one wireless device can receive the data,

whereby the data is not persistently stored outside the firewall arrangement until reception by the wireless device.

16. The system of claim 1, wherein the firewall arrangement includes an enterprise firewall arrangement.

17. The system of claim 1, wherein the at least one relay arrangement is configured to route the data via a private connection.

18. The system of claim 1, wherein the at least one relay arrangement is configured to route the data via a frame relay connection.

19. The system of claim 1, further comprising an enterprise monitoring element to monitor the at least one relay arrangement.

20. The method of claim 10, further comprising:

monitoring the at least one relay arrangement including the routing of the data from the relay arrangement.

21. The apparatus of claim 14, further comprising means for monitoring the means for routing.

22. The system of claim 1, wherein the at least one relay arrangement includes at least two parts, at least one of which shares a common hardware platform with the server arrangement.

23. The system of claim 15, wherein the at least one relay arrangement is configured to route the data over the wireless carrier network.

24. An apparatus to route data for transmission over a wireless carrier network, comprising:

a first arrangement to relay data stored in at least one database and processed by a server arrangement directly to a wireless carrier network for transmission to at least one wireless device, the first arrangement configured to be arranged behind a firewall arrangement that provides security for the data, the server arrangement and the first arrangement,

wherein the first arrangement is configured to push the data from behind the firewall arrangement to the at least one wireless device such that the data is only transmitted when the first arrangement to relay data determines that the at least one wireless device can receive the data, whereby the data is not persistently stored outside the firewall arrangement until reception by the wireless device.

25. The apparatus of claim 24, wherein the first arrangement is configured to transmit the data to a particular one of the at least one wireless device only when the particular wireless device is available to receive the data.

26. A system for transmitting data stored in at least one database to at least one wireless device, comprising:

a relay arrangement to route the data directly to a wireless carrier network for transmission over the wireless carrier network, the relay arrangement configured to communicate with the at least one wireless device via a firewall arrangement that provides security for the data and the relay arrangement,

wherein the relay arrangement is configured to push the data from behind the firewall arrangement to the at least one wireless device such that the data is only transmitted when the first arrangement to relay data determines that the at least one wireless device can receive the data, whereby the data is not persistently stored outside the firewall arrangement until reception by the wireless device.

27. The method of claim 10, wherein the data is sent through the firewall arrangement only when the at least one wireless carrier network is in service and the at least one wireless device is available to receive the data.

28. The system of claim 1, wherein the at least one relay arrangement is configured to route the data over an air interface.

29. The system of claim 1, wherein the at least one relay arrangement is configured to route the data via an RF-based communications methodology.

30. The apparatus of claim 14, wherein the means for processing and the means for routing share a common hardware platform.
31. The system of claim 1, wherein the at least one relay arrangement is configured to transmit the data over the wireless carrier network when the at least one wireless device is available to receive the data.
32. The system of claim 31, wherein the at least one relay arrangement is configured to store the data if the at least one wireless device is not available to receive the data.
33. The system of claim 1, wherein the data includes e-mail data.
34. The system of claim 1, wherein the at least one relay arrangement is configured to provide transport layer services.
35. The system of claim 34, wherein the transport layer services include end-to-end acknowledgement of the transmission of the data to the at least one handheld wireless device.
36. The system of claim 1, wherein the at least one relay arrangement is configured to be under exclusive control of a single enterprise.
37. The system of claim 1, wherein the at least one relay arrangement is configured to be a non-shared resource with respect to other enterprises.
38. The system of claim 1, wherein the data is transmitted directly over the wireless carrier network without being transmitted through the Internet.
39. The system of claim 1, wherein the at least one relay arrangement is configured to communicate with the wireless carrier network.
40. The system of claim 39, wherein the at least one relay arrangement is configured to convert the data according to a data packet protocol.
41. The system of claim 1, wherein the at least one relay arrangement is configured to provide the data to a plurality of device types over a plurality of wireless carrier network types.

42. The system of claim 41, wherein at least two of the plurality of wireless carrier network types operate according to different transmission protocols.
43. The system of claim 1, wherein the data is routed directly to the wireless carrier network via the Internet.
44. The method of claim 10, wherein the data is routed directly to the at least one wireless carrier network via the Internet.
45. The apparatus of claim 14, wherein the data is routed directly to the wireless carrier network via the Internet.
46. The system of claim 15, wherein the data is routed directly to the wireless carrier network via the Internet.
47. The apparatus of claim 24, wherein the data is relayed directly to the wireless carrier network via the Internet.
48. The system of claim 26, wherein the data is routed directly to the wireless carrier network via the Internet.
49. The system of claim 1, wherein the wireless carrier network is a public carrier network.
50. The method of claim 10, wherein the wireless carrier network is a public carrier network.
51. The apparatus of claim 14, wherein the wireless carrier network is a public carrier network.
52. The system of claim 15, wherein the wireless carrier network is a public carrier network.
53. The apparatus of claim 24, wherein the wireless carrier network is a public carrier network.
54. The system of claim 26, wherein the wireless carrier network is a public carrier network.
55. A system for transmitting data processed by a server arrangement to at least one wireless device that receives data from a wireless network, the system comprising:

a relay arrangement for routing the data to the wireless network for transmission over the wireless network to the at least one wireless device; and

a firewall arrangement that provides security for the data, the server arrangement and the relay arrangement;

wherein the relay arrangement is situated behind the firewall arrangement and is configured to push the data to the at least one wireless device such that the data is not stored outside of the firewall arrangement while enroute to the wireless network.

56. The system of claim 55, wherein the data is routed directly to the wireless network via the Internet.

57. The system of claim 55, wherein the data is routed directly to the wireless network via a dedicated connection.

58. The system of claim 57, wherein the dedicated connection includes a T1 connection.

59. The system of claim 57, wherein the dedicated connection includes a frame relay connection.

60. The system of claim 55, wherein the relay arrangement is configured to operate with more than one wireless network.

61. The system of claim 55, wherein the relay arrangement encodes the data.

62. The system of claim 55, wherein the relay arrangement is configured to push the data such that intermediate processing of the data does not occur enroute to the wireless network.

63. The system of claim 55, wherein the relay arrangement is configured to push the data such that the data is not transmitted until a connection is established between the relay arrangement and the at least one wireless device, and the at least one wireless device can receive the data.



64. The system of claim 63, wherein the data is not transmitted until the at least one wireless device is “on”, is within a service coverage area, and is logged onto the at least one wireless network.
65. The system of claim 63, wherein the connection is a synchronous connection.
66. The system of claim 63, wherein the connection is a secure connection.
67. The system of claim 63, wherein the connection is established using a data packet protocol.
68. The system of claim 63, wherein the connection is established using an Internet protocol.
69. The system of claim 55, wherein the data includes enterprise data.
70. The system of claim 55, wherein the relay arrangement is co-located on the same physical device.
71. An apparatus for transmitting data, comprising:  
an arrangement for relaying data to a wireless carrier network such that the data is only pushed beyond the arrangement to secure the data when the arrangement determines that at least one wireless device that receives data from over the wireless carrier network can receive the data,  
whereby the data is not persistently stored outside the arrangement to secure the data until reception by the wireless device.
72. The apparatus of claim 71, wherein the arrangement for relaying data is configured to encode the data.
73. The system of claim 1, wherein the at least one relay arrangement encodes the data.
74. The method of claim 10, further comprising:  
encoding the data prior to routing the data to the at least one wireless carrier network.
75. The system of claim 15, wherein the at least one relay arrangement encodes the data.

76. The system of claim 1, wherein the at least one wireless device includes a handheld wireless device.

77. The method of claim 10, wherein the at least one wireless device includes a handheld wireless device.

78. The system of claim 15, wherein the at least one wireless device includes a handheld wireless device.

79. The apparatus of claim 24, wherein the at least one wireless device includes a handheld wireless device.

80. The system of claim 26, wherein the at least one wireless device includes a handheld wireless device.

**IX. EVIDENCE APPENDIX**

There has been no evidence submitted under 37 C.F.R. 1.130, 1.131 or 1.32 in this case.

**X. RELATED PROCEEDINGS APPENDIX**

There are no decisions rendered by a court or the Board in any proceeding identified pursuant to 37 C.F.R. § 41.37(c)(1)(ii) relating to this appeal.